

PATENT SPECIFICATION

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PROVISIONAL SPECIFICATION.

Improvements relating to Door Fastenings for use more especially on Motor Vehicles.



I, ANDREW RICHARD EVERALL, of 73, Jakeman Road, Cannon Hill, Birmingham, a subject of the King of Great Britain, do hereby declare the nature of this invention to be as follows:—

This invention relates more especially to locks for doors of motor vehicles in which an internal dovetail member of the one part (the door or the door jamb) is adapted to fit into an external dovetail member of the other part, so as to locate the door and the door frame in proper relation to each other and keep them so when the door is shut. The invention is, however, applicable to other doors in which such dovetail members are required.

According to the present invention a relatively shallow external member with slanting curled ends is formed integral with or is rigidly attached to the fore end of the latch case and the striking plate which is screwed to the door jamb is formed as the internal member having its end slanted to correspond with the slant of the curled ends of the external member; and the said ends of the internal member are stepped up somewhat from the surface of the door jamb to allow them to engage in the curled ends of the external member. The usual latch bolt which extends through the fore end of the latch case comes immediately behind an abutment of the said striking plate

when the latter is fully engaged in the external member.

According to a convenient construction, the fore end plate of the lock case is slit from its top and bottom edges for a short distance in each case along a line which is immediately behind the lock bolt head and the ends of the said fore end beyond the slits are curled round to form the ends of the external member and the said ends are slanted towards each other in a direction towards the outer face of the door. The striking plate consists of a metal plate the ends of which are rounded and slanted to adapt them to fit accurately into the external member and they are stepped up from the inner face of the plate to allow the curled ends of the external member to ride in behind them as the door is closed. When the plate is fully home in the external member, its rear edge comes immediately in front of the lock bolt. The striking plate may have an intermediate slot to receive the latch bolt head thus to provide a safety catch.

Dated this 18th day of January, 1933.
STEPHEN WATKINS, SON &
GROVES,
Chartered Patent Agents,
Metropolitan Chambers, Wolverhampton,
Agents for the Applicant.

COMPLETE SPECIFICATION.

Improvements relating to Door Fastenings for use more especially on Motor Vehicles.

I, ANDREW RICHARD EVERALL, of 73, Jakeman Road, Cannon Hill, Birmingham, a subject of the King of Great Britain, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to fastenings (known as locks) for the doors of motor vehicles, the term locks including latches

whether provided with locking mechanism or not. The invention is however applicable to locks for doors used in other connections.

In a type of door lock already known for use with motor cars, the fore end of the lock case is extended a considerable distance above and below the rest of the lock case, and the top and bottom ends of such fore end are curled over in a direction towards the door jamb each curl

being slanted somewhat towards the other curl whereby they form, together with the rest of the fore end, a tapering recess adapted to receive a striking plate in the form of a block with correspondingly slanted top and bottom edges said block being secured to the door jamb and spaced a short distance therefrom at its ends, to allow the curled ends of the fore end to pass behind.

A disadvantage of the construction is that the curled ends have been relatively far apart because they come above and below the flat portion of the fore end in which the holes for the securing screws are formed as it is expedient for these to be positioned above and below the main part of the lock casing. As a consequence the block must be very long in a vertical direction to fit into the curled ends of the fore end.

The object of this invention is to effect improvements in a lock of this type.

According to this invention, the fore end of the lock case is slit for a distance down from its upper edge and for a distance up from its lower edge and the portions of the ends of the fore end plate which lie on the same side of the slits are curled over towards the door jamb and in such a way that each curled over portion slants somewhat towards the other. With this construction the curled over parts are much nearer together than has heretofore been the case. The portions of the fore end which are not curled over have formed therein the holes for the securing screws.

The slits are preferably made in the vertical plane of the outer face of the bolt head and the door is secured by the bolt head passing immediately behind the block. The latter may have a recess at about its middle for the engagement therewith of the bolt head to provide a safety catch. The rearward and outward edge of the block may be chamfered off to facilitate slamming the door.

A convenient embodiment of the invention is described with reference to the drawings herewith of which:—

Figure 1 is a perspective view of the lock casing fixed to a motor car door.

Figure 2 is a perspective view of the block fitted to the corresponding door jamb.

Figure 3 is a view corresponding to Figure 1 but showing the positions of the block relative to the lock case when engaged therewith. In this view the block is necessarily shown detached from the door jamb.

Figure 4 is a view in elevation to show the face of the fore end plate and its relation to the door edge.

Figure 5 is a corresponding view of the face of the block to show its relation to the door jamb; and,

Figure 6 is a vertical section taken in the plane indicated by the line 6, 6, of Figure 4 and also of Figure 5 the block being in engagement with the curled ends of the fore end plate.

In these drawings A is the face plate of the lock and B the fore end plate thereof. C is the bolt head having the usual chamfer c. In the plane of the outer face of the bolt head the fore end is slit at d, e, and the portions of the fore end which are outwards of the slits are curled over as shown at f, g. These curled over portions are slanted towards one another in a direction towards the outer face of the door, the fore end being shaped before bending in such a way that the inner edges of the curled portion are each parallel to the rest of the curl.

Screw holes h, i, are formed in the plain extended portions m, n, of the fore end. Additional screw holes p, q, may be formed in the part of the fore end plate which is between the curled ends, but they must be outwards of the rest of the lock case.

D is the block having rounded top and bottom edges E, E, and these are offset from the inner face of the block (see especially Figure 6) to allow the edges of the curled portions f, g, to come behind them as has heretofore been the case. F is a recess to receive the bolt head and to form a safety catch.

When the door is closed the rounded ends E, E, enter the curled portions f, g, and become wedged therein when fully home. At such time the bolt head passes behind the block (see Figure 3) and its engaging face may be slightly sloped to cause it to hold the rounded edges E, E, firmly in the curled portions. In this way the door is held very firmly and prevented from moving in any direction.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. A lock of the type set forth characterised in that the fore end plate is slit for a distance down from its upper edge and for a distance up from its lower edge and that the portions of the fore end plate which are on one side of the slits are curled over in a direction towards the door jamb and in such a way that each curled over portion slants towards the other so as to receive correspondingly slanted top and bottom edges of the block forming the striking plate.

2. A lock as in claim 1 further char-

acterised in that the block has a recess formed in it to receive the bolt head and act as a safety catch.

3. A lock having its fore end and catch
5 plat constructed substantially as described with reference to the drawings herewith.

Dated this 18th day of January, 1934.

STEPHEN WATKINS, SON &
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Agents for the Applicant.

Redhill: Printed for His Majesty's Stationery Office, by Love & Malcomson, Ltd.—1934.

[This Drawing is a reproduction of the Original on a reduced scale.]

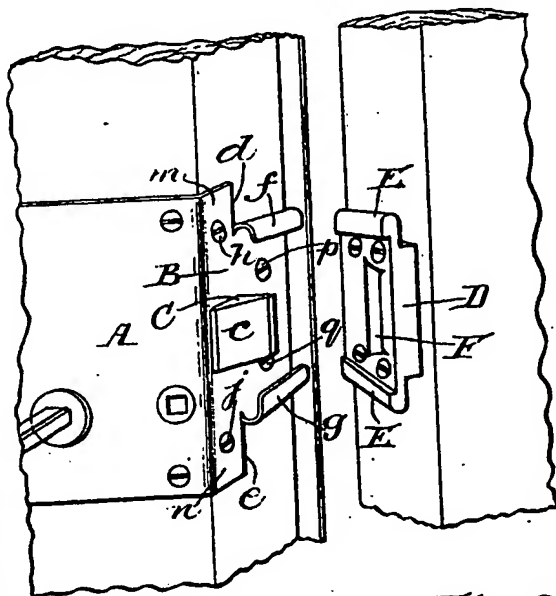


Fig. 1.

Fig. 2.

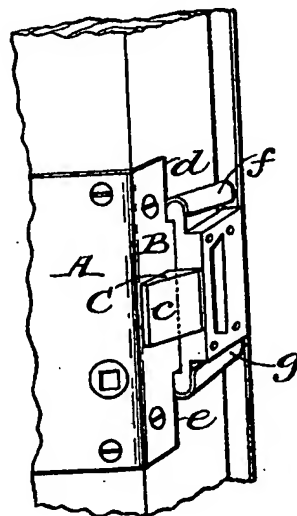


Fig. 3.

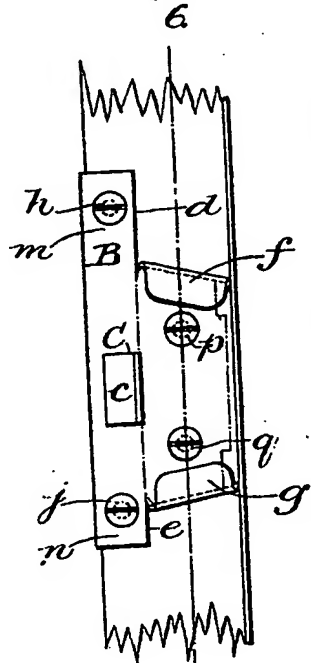


Fig. 4.

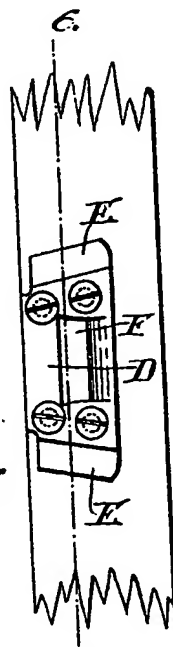


Fig. 5.

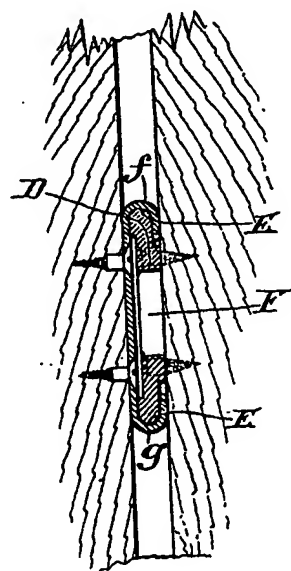


Fig. 6.